

What is claimed is:

- 1                   1.     A fluid quick connector comprising:  
2                   a connector housing configured to mate with an endform;  
3                   an electrical contact mounted in the connector housing for establishing  
4                   electrical contact between an outer surface of endform and the connector housing.
  
- 1                   2.     The fluid quick connector of claim 1 wherein the electrical  
2                   contact comprises:  
3                   an electrically conductive annular body having an outer diameter  
4                   disposing the body in contact with an inner diameter of the bore in the connector  
5                   housing; and  
6                   a radially inward extending contact member carried on the electrical  
7                   contact adapted to engage the male endform where the endform is mounted in the  
8                   bore in the connector housing.
  
- 1                   3.     The fluid quick connector of claim 2 wherein:  
2                   the at least one projection comprises a plurality of circumferentially  
3                   spaced projections.
  
- 1                   4.     The fluid quick connector of claim 3 wherein:  
2                   the plurality of circumferentially spaced projections comprises at least  
3                   three projections.
  
- 1                   5.     The fluid quick connector of claim 3 wherein the plurality of  
2                   projections are equi-circumferentially spaced about an inner surface of the annual  
3                   body.
  
- 1                   6.     The fluid quick connector of claim 1 wherein the electrical  
2                   contact comprises:

3 an electrically conductive top hat mountable in a bore of the connector  
4 housing for holding a seal element in the bore, the top hat having an inner bore  
5 receiving the endform; and  
6 the contact member being at least one radially inward extending  
7 projection carried on the top hat adapted to engage the endform when the endform is  
8 inserted into the bore in the connector housing.

1 7. The fluid quick connector of claim 6 wherein:  
2 the at least one projection comprises a plurality of circumferentially  
3 spaced projections.

1 8. The fluid quick connector of claim 7 wherein:  
2 the plurality of circumferentially spaced projections comprises at least  
3 three projections.

1 9. The fluid quick connector of claim 7 wherein the plurality of  
2 projections are equi-circumferentially spaced about an inner surface of the top hat.

1 10. The fluid quick connector of claim 1 wherein the electrical  
2 contact comprises:  
3 a spacer mounted in the bore about the endform; and  
4 the contact member being at least one radially inward extending  
5 projection carried on the spacer adapted to engage the endform when the endform is  
6 inserted into the bore in the connector housing.

1 11. The fluid quick connector of claim 1 further comprising:  
2 the connector housing and the endform being electrically conductive.

1 12. A fluid quick connector comprising:  
2 a connector housing configured to mate with an endform;

3 a spacer mounted in a through bore of the connector housing about the  
4 male endform to the connector housing; and  
5 an electrical contact member carried on the spacer for establishing  
6 electrical contact between the endform and the connector body.

1 13. The fluid quick connector of claim 11 wherein the contact  
2 member comprises:  
3 the spacer formed of an electrically conductive material; and  
4 at least one radially inward projection carried on the spacer adapted to  
5 engage the endform where the endform is mounted in the bore in the connector  
6 housing.

1 14. The fluid quick connector of claim 13 wherein:  
2 the at least one projection of the contact member comprises a plurality  
3 of circumferentially spaced projections.

1 15. The fluid quick connector of claim 13 wherein:  
2 the plurality of circumferentially spaced projections comprises at least  
3 three projections.

1 16. A fluid quick connector comprising:  
2 the connector housing and the endform being electrically conductive;  
3 a top hat mountable in a bore of the connector housing for holding the a  
4 seal element in the bore, the top hat receiving the endform therethrough, the top hat  
5 formed of an electrically conductive material; and  
6 the electrical contact member being at least one radially inward  
7 extending projection carried on the top hat adapted to engage the endform when the  
8 endform is inserted into the bore in the connector housing.

1 17. The fluid quick connector of claim 16 wherein:  
2 the at least one projection comprises a plurality of circumferentially  
3 spaced projections.

1 18. The fluid quick connector of claim 16 wherein:  
2 the plurality of projections comprises three circumferentially spaced  
3 projections.

1 19. A fluid quick connector comprising:  
2 a connector housing configured to mate with an endform along a first  
3 axis;  
4 the connector housing and the endform being electrically conductive;  
5 a spacer and a top hat disposed in a through bore in the connector  
6 housing about the endform; and  
7 an electrical contact member carried on one of the spacer and the top  
8 hat for establishing electrical contact between the endform and the connector body.

1 20. The fluid quick connector of claim 19 further comprising:  
2 at least one of the spacer and the top hat formed of an electrically  
3 conductive material; and  
4 the electrical contact member being a radially inward projection carried  
5 on one of the spacer and the top hat adapted to engage the endform where the male  
6 endform is mounted in the bore in the connector housing.

1 21. The fluid quick connector of claim 20 wherein:  
2 the at least one projection comprises a plurality of circumferentially  
3 spaced projections.

1 22. The fluid quick connector of claim 21 wherein:

2 the plurality of circumferentially spaced projections comprises at least  
3 three projections.

1 23. An electrical contact for a fluid quick connector having a  
2 connector housing configured to mate with an endform, the electrical contact  
3 comprising:  
4 an electrically conductive body adapted to be disposed in a bore of a  
5 connector housing about an endform inserted into the housing to establish electrical  
6 contact between the endform and the connector housing.

1 24. The electrical contact of claim 23 further comprising:  
2 the electrically conductive body having an outer diameter disposing the  
3 body in contact with an inner diameter of the bore in the connector housing; and  
4 At least one radially extending contact carried on the body adapted to  
5 engage the endform where the endform is mounted in the bore in the connector  
6 housing.

1 25. The electrical contact of claim 24 wherein:  
2 the at least one contact projection comprises a plurality of  
3 circumferentially spaced contact projections.

1 26. The electrical contact of claim 25 wherein:  
2 the plurality of circumferentially spaced contact projections comprises  
3 at least three contact projections.

1 27. The electrical contact of claim 25 wherein the plurality of  
2 contact projections are equi-circumferentially spaced about an inner surface of the  
3 contact body.

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